

REMARKS

The Office Action mailed on April 9, 2003, has been received and reviewed.

Claims 1-97 were previously pending in the above-referenced application.

Claims 1-30, 42-49, and 75-88 have been considered. Of these, claims 1-8, 10-19, 21-30, 42-49, 75-77, 79, 81-84, 86, and 88 stand rejected. Claims 9, 20, 78, 80, 85, and 87 stand rejected for depending from a rejected base claim, but it has been indicated that each of these claims recites allowable subject matter.

Claims 31-41, 50-74, and 89-97, which have been withdrawn from consideration as being drawn to a non-elected invention, have been canceled without prejudice or disclaimer.

Reconsideration of the above-referenced application is respectfully requested.

Preliminary Amendment

Please note that a Preliminary Amendment was filed in the above-referenced application on December 10, 2001, but that the undersigned attorney has not yet received any confirmation that the Preliminary Amendment has been entered into the Office file for the above-referenced application. If, for some reason, the Preliminary Amendment has not been entered, the undersigned attorney would be happy to provide a true copy thereof the Office.

Rejections Under 35 U.S.C. § 102(b)

Claims 1, 2, and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,440,177 to Anderson et al. (hereinafter "Anderson").

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, the identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Additionally, the elements must be arranged as required by the claim, but identity of the terminology is not required. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Anderson describes a system that includes a differential flow meter, a carbon dioxide analyzer, and an oxygen analyzer. As explained at col. 3, lines 1-6, and at col. 6, lines 1-24, which refers to FIGs. 1 and 2, the nosepiece 10 of Anderson includes a sample tube 20 which leads to a CO₂ analyzer 74 and to an O₂ analyzer 80, both of which are located remotely from the nosepiece 10, and neither of which includes a component is part of an airway adapter or which is otherwise positioned along an airway or other conduit through which an individual breathes.

Independent claim 1 is drawn to an airway adapter that is configured to substantially simultaneously provide data indicative of respiratory gas flow and of a concentration of at least two substances present in respiration of an individual. The airway adapter of independent claim 1 includes a housing with a bore formed therethrough, a respiratory flow detection component, a first respiratory detection component, and a second respiratory detection component. The respiratory flow detection component is formed in the housing and communicates with the bore. The first respiratory detection component is configured to facilitate sensing of at least a first of the at least two substances without diverting respiratory gases from the housing. The second respiratory detection component of the airway adapter is configured to facilitate sensing of at least a second of the at least two substances without diverting respiratory gases from the housing.

Anderson lacks any express or inherent description of an airway adapter, as that term is commonly used in the art, let alone of an airway adapter which includes a respiratory flow detection component and respiratory detection components for sensing at least two substances in respiration, as required by independent claim 1.

Moreover, Anderson neither expressly nor inherently describes an airway adapter that includes first and second respiratory detection components that are configured to facilitate sensing of respective first and second substances without diverting respiratory gases from the housing of the airway adapter.

Therefore, it is respectfully submitted that Anderson does not anticipate each and every element of independent claim 1, as is required to maintain a rejection under 35 U.S.C. § 102(b).

Claims 2 and 8 are both allowable, among other reasons, for depending from claim 1, which is allowable.

Claim 8 is further allowable because Anderson neither expressly nor inherently describes that the CO₂ analyzer 74 and the O₂ analyzer 80 thereof include at least one common element.

For these reasons, it is respectfully requested that the 35 U.S.C. § 102(b) rejections of claims 1, 2, and 8 be withdrawn.

Rejections Under 35 U.S.C. § 103(a)

Claims 3-7, 10-19, 21-30, 42-49, 75-77, 79, 81-84, 86, and 88 stand rejected under 35 U.S.C. § 103(a).

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The art that may be relied upon in a rejection under Section 103(a) is, however, limited by 35 U.S.C. § 103(c), which provides:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Anderson in View of Labuda

Claims 7, 22-27, 42-49, 75-77, 79, 81-84, 86, and 88 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of U.S. Patent 6,325,978 to Labuda et al. (hereinafter "Labuda").

Labuda issued on December 4, 2001, from a patent application that was filed on August 4, 1998. While the August 4, 1998, filing date of Labuda predates the April 24, 2001, filing date of the above-referenced application, Labuda did not issue until after the above-referenced application was filed. As such, Labuda only qualifies as prior art to the above-referenced application under 35 U.S.C. § 102(e).

Moreover, Labuda, as indicated on the cover page thereof, has been assigned to NTC Technology Inc., the same entity to which the inventors named in the above-referenced application are obligated to assign and have assigned their interests in the above-referenced application. The assignment documents are being filed and recorded with the Office on even date herewith.

In view of the foregoing, it is respectfully submitted that Labuda cannot be relied upon in a 35 U.S.C. § 103(a) rejection of any of the claims of the above-referenced application.

Further, as has been indicated in the outstanding Office Action, the oxygen sensor of Anderson “is not a luminescence quenching sensor.” Page 3. Thus, Anderson does not teach or suggest each and every element of any of claims 7, 22-27, 42-49, 75-77, 79, 81-84, 86, and 88. Therefore, Anderson does not, by itself, support a *prima facie* case of obviousness against any of these claims.

For these reasons, it is respectfully requested that the 35 U.S.C. § 103(a) rejections of claims 7, 22-27, 42-49, 75-77, 79, 81-84, 86, and 88 be withdrawn.

Anderson in View of Kofoed

Claims 3-6, 10-19, 21, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of U.S. Patent 5,789,660 to Kofoed et al. (hereinafter “Kofoed”).

Claims 3-6, 10-19, and 21 are each allowable, among other reasons, as depending either directly or indirectly from claim 1, which is allowable.

Claim 28 is allowable, among other reasons, for depending from claim 22, which is allowable.

Furthermore, it is respectfully submitted that there are at least two reasons that the asserted combination of teachings from Anderson and Kofoed does not support a *prima facie* case of obviousness against any of claims 3-6, 10-19, 21, or 28.

First, it is respectfully submitted that one of ordinary skill in the art would not have been motivated to combine the teachings of Anderson and Kofoed in such a way as to render obvious either an airway adapter that includes a respiratory flow detection component and more than one component for sensing at least two substances present in respiration of an individual, as recited in independent claim 1, or an airway adapter that includes both an infrared detection component and a luminescence quenching detection component to sense at least two substances present in respiration of an individual, as recited in independent claim 22.

In particular, as noted previously herein, the teachings of Anderson are limited to a system which lacks an airway adapter, but includes a respiratory flow detection component and CO₂ and O₂ analyzers that are positioned remotely from the flow detection component. Thus, Anderson lacks any motivation to place all of the elements on an airway adapter, let alone along an airway. Kofoed, while being directed to an airway adapter that is configured with both respiratory flow and infrared detection components, provides no motivation to one of ordinary skill in the art to add another gas sensing element to the airway adapter taught therein. Neither of these references so much as mentions the use of luminescence quenching technology in an airway adapter. It is also submitted that, before the filing date of the above-referenced application, there was no knowledge that was generally available in the art that would have motivated one of ordinary skill in the art to develop an airway adapter that includes components for measuring respiratory flow and at least two substances present in an individual's respiration (claim 1) or an airway adapter that includes a component that is used in infrared sensing, as well as a component that is used in luminescence quenching sensing (claim 22).

Second, it is respectfully submitted that there would be no reason for one of ordinary skill in the art to believe that a combination of teachings from Anderson and Kofoed would have been successful. The best result that could be expected from a combination of teachings from Anderson and Kofoed would have been an airway adapter that includes a component for use in measuring respiratory flow, an infrared sensing component, and a port for receiving a first end of

a sample tube, the second end of which would be coupled to a remotely located O₂ analyzer. Thus, the airway adapter of such a system would not itself include any component of the O₂ analyzer.

For these reasons, it is respectfully submitted that a *prima facie* case of obviousness has not been established against any of claims 3-6, 10-19, 21, or 28 and, thus, that, under 35 U.S.C. § 103(a), each of these claims is allowable over the asserted combination of Anderson and Kofoed.

Anderson in View of Kofoed and Labuda

Claims 29 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of Kofoed and Labuda.

Again, Labuda merely qualifies as prior art to the subject matter which is newly described in the above-referenced application under 35 U.S.C. § 102(e). In view of that fact, along with the obligation of the inventors of the above-referenced application to assign their interests in the above-referenced application to NTC Technology Inc., the same entity to which Labuda has been assigned, it is respectfully submitted that Labuda cannot be relied upon in a 35 U.S.C. § 103(a) rejection of any of the claims of the above-referenced application.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claims 29 and 30 is respectfully requested.

In view of the foregoing, it is respectfully requested that the 35 U.S.C. § 103(a) rejections of claims 3-7, 10-19, 21-30, 42-49, 75-77, 79, 81-84, 86, and 88 be withdrawn.

Allowable Subject Matter

The indication that claims 9, 20, 78, 80, 85, and 87 recite allowable subject matter is gratefully acknowledged. Nonetheless, none of these claims has yet been amended to independent form, as the base claims from which they depend are also believed to be allowable.

CONCLUSION

It is respectfully submitted that each of claims 1-30, 42-49, and 75-88 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing allowance of the above-referenced application remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,



Brick G. Power
Registration No. 38,581
Attorney for Applicants
TRASKBRITT, PC
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: July 9, 2003

BGP/dlm:djp
Document in ProLaw